



## TROPICAL DEPRESSION 17W

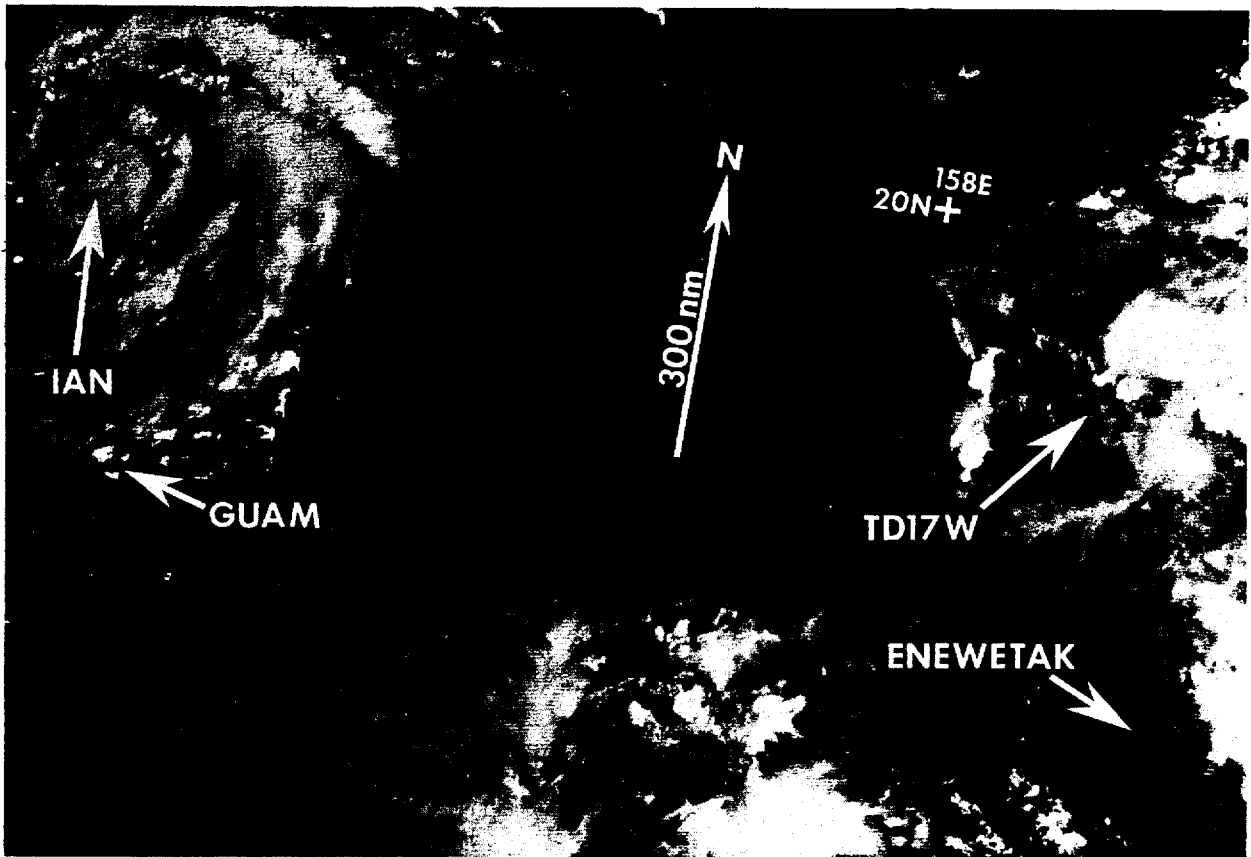


Figure 3-17-1. Tropical Depression 17W slowly developed from a tropical disturbance 250 nm (463 km) north of the Marshall Islands during the same period JTWC was warning on Typhoon Ian (16W). It was first detected on satellite imagery on the 23rd of September and mentioned on the Significant Tropical Weather Advisory (ABPW PGTW) as a new suspect area at 0600Z. JTWC issued a Tropical Cyclone Formation Alert nearly 24-hours later at 240330Z when this system displayed increased convective organization. Maximum sustained surface winds, at that time, were estimated at 15 to 25 kt (8 to 13 m/sec). The first warning on Tropical Depression 17W was issued at 241800Z based on satellite intensity estimate (Dvorak, 1984) of 35 kt (18 m/sec) winds at the surface. A well-established mid-level ridge was located to the northeast of Tropical Depression 17W. At the same time, an eastward-progressing, mid-latitude trough to the north was beginning to influence the system. This trough continued to suppress Tropical Depression 17W's development even after it had passed to the northeast of the disturbance. Concurrently, Typhoon Ian's (16W) upper-level outflow (at the left of the image) restricted Tropical Depression 17W's outflow in the northwest quadrant. This combination of factors appears to have stopped further intensification and induced dissipation over water. The last warning was issued on the 26th of September at 0600Z. The satellite image above shows Tropical Depression 17W shortly before the second warning was issued, while it was at its maximum intensity of 30 kt (15 m/sec) and 960 nm (1778 km) east-southeast of Typhoon Ian (16W). A partially exposed low-level circulation is visible slightly west of the heaviest convection (242305Z September DMSP visual imagery).